

Title: Agents That Bind To And Inhibit Human Cytochrome ...
Attorney Docket No. 015280-389200US

1/11



| | | • | | P450 | | | |
|---------------|-----|-------|-------|-------|------|------|---------|
| MAb/P450 | 2C8 | 2C9*1 | 2C9*2 | 2C9*3 | 2C18 | 2C19 | *others |
| MAb 292-2-3 | ı | 1 | • | • | ı | 1 | , |
| MAb 592-2-5 | 1 | ++ | +++ | ++ | +++ | t | 1 |
| MAb 5-7-5 | + | ++ | +++ | ++ | + | ++ | ı |
| MAb 5-1-5 | ++ | • | • | • | • | 1 | • |
| MAb 281-1-1 | ++ | • | | • | • | • | ı |
| MAb 763-15-20 | ++ | ++ | +++ | ++ | • | • | • |
| | | | | | | | |

*other P450's include 1A1, 1A2, 2A6, 2B6, 2D6, 2E1, 3A4, 3A5 (-) signifies no activity

FIG. 1

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Applicant: Harry V. Gelboin et al. Title: Agents That Bind To And Inhibit Human Cytochrome ...

Attorney Docket No. 015280-389200US

2/11

| | | | P450 | 50 | | |
|--------------|------|-------|-------|------|------|-----------------|
| MAb/P450 | 2C8 | 2C9*2 | 2C9*1 | 2C18 | 2C19 | *other P450s |
| MAb 292-2-3 | 0 | 92.5 | 11.0 | 0 | 0 | 0 |
| MAb 592-2-5 | 0 | 8.06 | 9.08 | 82.0 | 0 | 0 |
| MAb 5-7-5 | 0 | 96.0 | 91.3 | 93 | 92 | 0 |
| MAb 5-1-5 | 0.96 | 0 | 0 | 0 | 0 | 0 |
| MAb 281-1-1 | 91.0 | 0 | 0 | 0 | 0 | 0 |
| MAb 763-15-5 | 0 | 90 | 88.2 | 30 | 0 | 0 |
| | | | | | | |

Title: Agents That Bind To And Inhibit Human Cytochrome ...
Attorney Docket No. 015280-389200US

3/11

| | | P450 | 20 | |
|-------------|------|----------------------------|------|------|
| MAb | 2C8 | 2C9 _{Cys144} (*2) | 2C18 | 2C19 |
| MAb 292-2-3 | 0 | 91 | 0 | 0 |
| MAb 592-2-5 | 0 | 88 | 99 | 0 |
| MAb 5-7-5 | 0 | 93 | 93 | 63 |
| MAb 5-1-5 | 91.6 | 0 | 0 | 0 |
| MAb 281-1-1 | 91.8 | 0 | 0 | 0 |
| | | | | |

FIG. 3

Title: Agents That Bind To And Inhibit Human Cytochrome ...
Attorney Docket No. 015280-389200US

4/11

| 18 h2C19 Inhibits | | 7 P. | - 000 | | + + + | % / / / / / / / / / / / / / / / / / / / | | 000 | , | 700 |
|-------------------|-------------|--|-------------|----------------|-------------|---|-------|-----|---|-----|
| h2C18 | ı | , | + | ++++ | +++++ | + | 1 | | • | 1 |
| h2C9*3 | • | 1 | ‡ | + | ‡ | ++ | ı | • | • | ı |
| h2C9*2 | +++ | 1 | +++ | ++++ | + + + | +++ | • | - | • | ı |
| h2C9*1 | - | • | +++ | +++ | ++ | ++ | • | 1 | 1 | ı |
| h2C8 | - | • | ŧ | | 1 | + | ++ | ++ | ++ | ++ |
| lmmuno Binding | ELISA | B | ELISA | 18 | ELISA | IB | ELISA | B) | ELISA | 8 |
| MAb | MAE 202 2 3 | 0-2-262 0010 | MAP 602 2 E | 0-12-1200 0000 | 748 F 7 | C-1-C CIVINI | MARAE | | 7 V V V V V V V V V V V V V V V V V V V | |

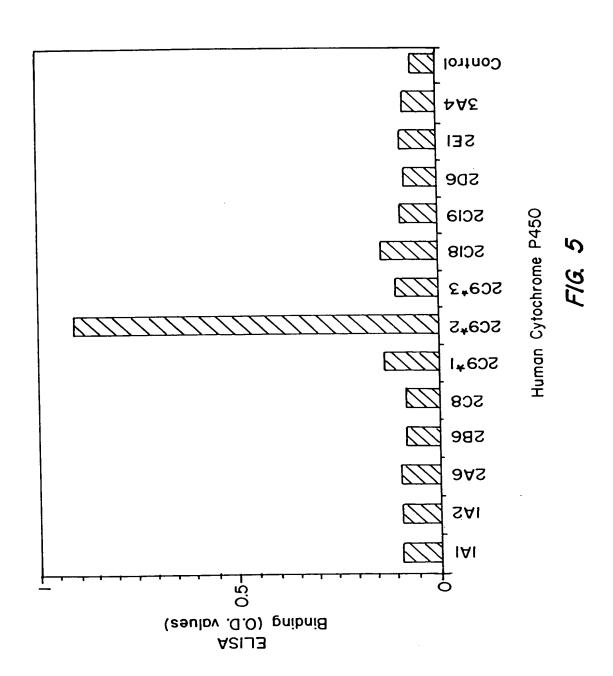
FIG. 4

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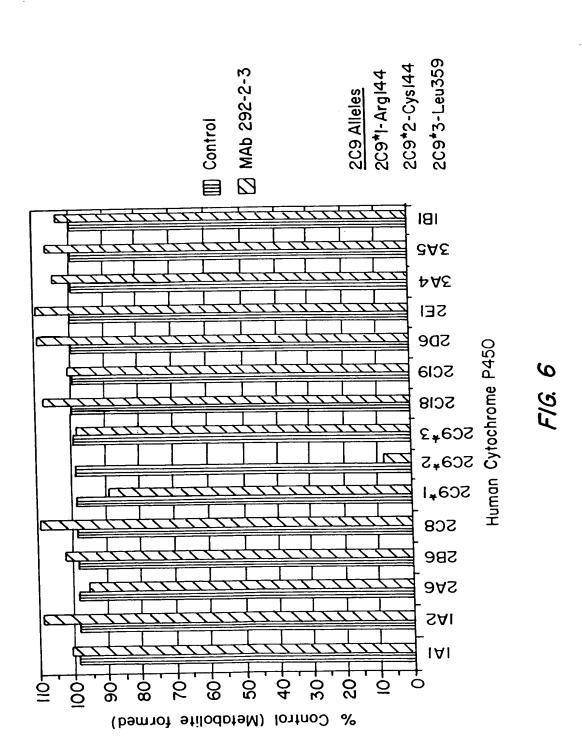
2C9 Alleles 2C9*I-Arg144 2C9*2-Cys144 \\\2C9*3-Leu359



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Attorney Docket No. 015280-389200US

6/11



Title: Agents That Bind To And Inhibit Human Cytochrome ...
Attorney Docket No. 015280-389200US

7/11

2C9 ALLELE^

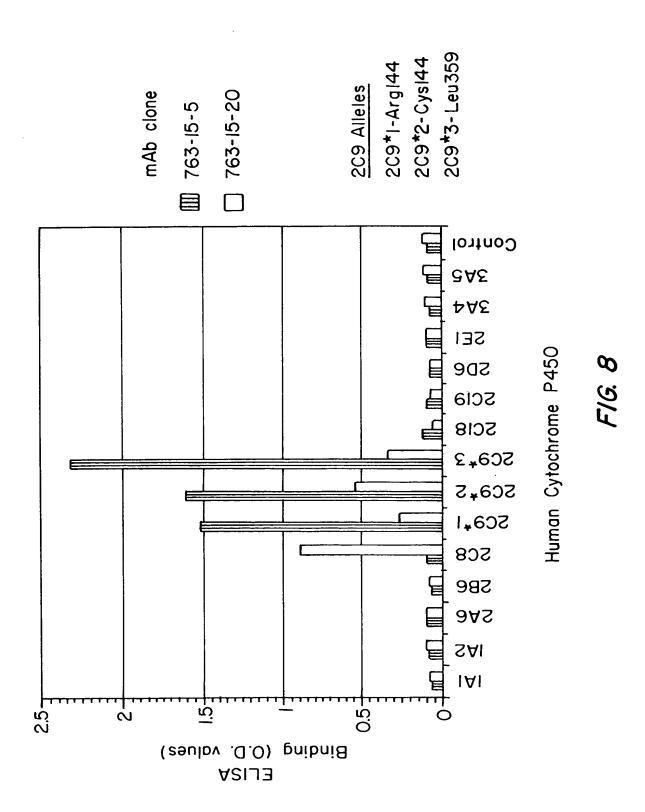
| | * | *1 - WT Arg144 | 44 | *2 | *2 - Arg144Cys | ys | *3 | *3 - Ile359Leu | ne |
|-------------|--------------|----------------|-------|---------------|----------------|-------|---------------|----------------|-------|
| Substrate | Control + MA | + MAb | % Inh | Control + MAb | + MAb | % Inh | Control + MAb | + MAb | % Inh |
| Tolbutamide | 1.0 | 86.0 | 1.3 | 0.85 | 0.03 | 96.4 | 0.22 | 0.02 | 9.3 |
| Diclofenac | 0.3 | 6.0 | 0.1 | 0.42 | 0.02 | 1.36 | 0.35 | 08.0 | 14.4 |

^P450 activity is(nmolproduct/min/nmolP450)

F/G. 7

Title: Agents That Bind To And Inhibit Human Cytochrome ...
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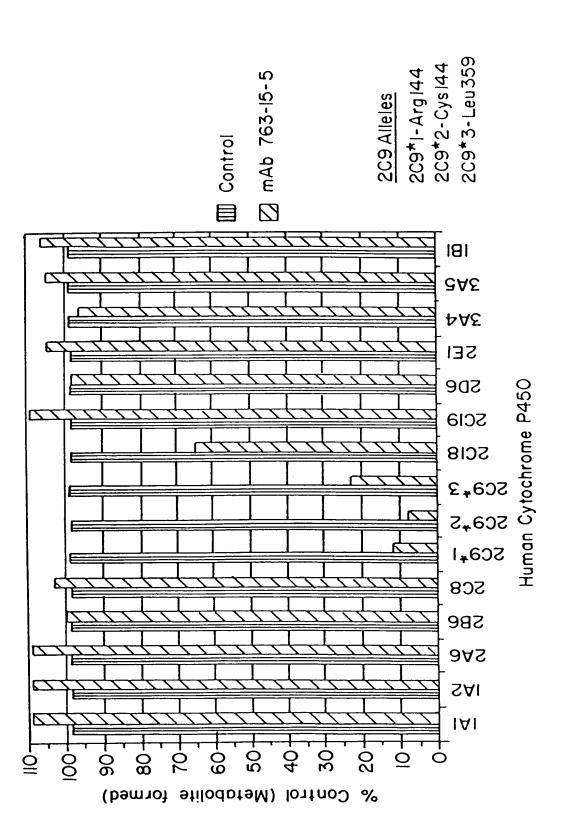
8/11



Title: Agents That Bind To And Inhibit Human Cytochrome ...

Attorney Docket No. 015280-389200US

9/11



F16 9

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Title: Agents That Bind To And Inhibit Human Cytochrome ...

Attorney Docket No. 015280-389200US

10/11

No Blot

MAb 763-15-5

2C8
2C9*2
2C18
2C19
control
2C9*1
2C9*3

MAb 763-15-20

2C9 Alleles 2C9*1-Arg144 2C9*2-Cys144 2C9*3-Leu359

Title: Agents That Bind To And Inhibit Human Cytochrome ...
Attorney Docket No. 015280-389200US

11/11

| | · · · · · · · · · · · · · · · · · · · | · · · · · · · · · · · · · · · · · · · |
|-----------------------|---------------------------------------|---------------------------------------|
| 2C9 Arg144 Leu359 | %8'72 | 0.2% |
| 2C9 _{Cys144} | 93.2% | 11.2% |
| 2C9 Arg144 | 77.4% | %5'5 |
| Mab clone | 763-15-5 | 763-15-20 |

% Inhibition of enzyme

FIG. 11